

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	Art Unit: N/A
Asher FRIESEM et al.	)	Examiner: N/A
Serial No.: 09/403,472	)	Washington, D.C.
Filed: October 22, 1999	)	May 31, 2000
For: OPTICAL RESONATORS WITH DISCONTINUOUS PHASE ELEMENTS	)	Docket No.: C608:36256



INFORMATION DISCLOSURE STATEMENT [IDS]

Honorable Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir:

This Information Disclosure Statement is submitted in accordance with 37 C.F.R. 1.97, 1.98, and it is requested that the information set forth in this statement and in the listed documents be considered during the pendency of the above-identified application, and any other application relying on the filing date of the above-identified application or cross-referencing it as a related application.

☒ 1. This IDS should be considered, in accordance with 37 C.F.R. 1.97, as it is filed:

(Check one of the boxes A-D)

☐ A. within three months of the filing date of the above-identified national application or within three months of the entry into the national stage of the above-identified international application.

☒ B. before the mailing date of a first office action on the merits.

☐ C. after (A) and (B) above, but before final rejection or allowance, and Applicants have made the necessary certification (box "i" below) or paid the necessary fee (box "ii" below).

(check one of the boxes "i" and "ii" below:)

☐ i. Counsel certifies that, upon information and belief, each item of information listed herein was either (a) cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS; or (b) was not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of undersigned after making reasonable inquiry, was not known to any individual designated in 1.56(c) more than three months prior to the filing of this IDS.

☐ ii. A check for the fee set forth in 1.17(p), presently believed to be \$210, is enclosed (check no. \_\_\_\_\_).

☐ D. after (A), (B) and (C) above, but before payment of the issue fee: Applicant petitions under 37 C.F.R. 1.97(d) for the consideration of this IDS. A check for the fee set forth in §1.17(i), presently believed to be \$130 is enclosed (check no. \_\_\_\_\_). Counsel certifies that, upon information and belief, each item of information listed herein was either (i) cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the IDS; or (ii) was not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the undersigned after making reasonable inquiry, was not known to any individual designated in 1.56(c) more than three months prior to the filing of this IDS.

☐ 2. In accordance with 37 C.F.R. 1.98, this IDS includes a list (e.g., form PTO-1449) of all patents, publications, or other information submitted for consideration by the office, either incorporated into this IDS or as an attachment hereto. A copy of each document listed is attached, except as explained below.

(check boxes A and/or B and fill in blanks, if appropriate.)

☐ A. Document(s) \_\_\_\_\_ is (are) deemed substantially cumulative to document(s) \_\_\_\_\_, and, in accordance with 1.98(c), only a copy of each of the latter documents is enclosed.

☐ B. Certain documents were previously cited by or submitted to the Office in the following prior application(s), which are relied upon under 35 U.S.C. 120:

[insert serial numbers and filing dates of prior applications]

Applicant identifies these documents by attaching hereto copies of the forms PTO-892 and PTO-1449 from the files of the prior application(s) or a fresh PTO-1449 listing these documents, and request that they be considered and made of record in accordance with 1.98(d). Per 37 CFR 1.98(d), copies of these documents need not be filed in this application.

☐ 3. Document(s) \_\_\_\_\_ is (are) not in the English language. In accordance with 1.98(c), Applicant states:

☐ An English translation of each document \_\_\_\_\_ (or of the pertinent portions thereof), or a copy of each corresponding English-language patent or application, or English-language abstract (or claim) is enclosed.

☐ A concise explanation of the relevance of document(s) \_\_\_\_\_ is found in the attached search report (see reply to Comment 68 in the preamble to the final rules; 1135 OG 13 at 20).

☐ A concise explanation of the relevance of document(s) \_\_\_\_\_ is set forth as follows:  
[Insert concise explanation of relevance]

☐ A concise explanation of the relevance of document(s) \_\_\_\_\_ can be found on page(s) \_\_\_\_\_ of the specification.

☐ A concise explanation of document(s) \_\_\_\_\_ can be found on the attached sheet.

4. No explanation of relevance is necessary for documents in the English language (see reply to Comments 67 and 68 in the preamble to the final rules; 1135 OG 13 at 20).

[X] 5. Other information being provided for the examiner's consideration follows:

An International Search Report dated August 28, 1998, which issued during the prosecution of Applicant's PCT Patent Application No. PCT/IL98/00204, which corresponds to the present application.

6. In accordance with 37 C.F.R. 1.97(g) and (h), the filing of this IDS should not be construed as a representation that a search has been made or that information cited is, or is considered to be, material to patentability as defined in §1.56 (b), or that any cited document listed or attached is (or constitutes) prior art. Unless otherwise indicated, the date of publication indicated for an item is taken from the face of the item and Applicant reserves the right to prove that the date of publication is in fact different.

**CROSS REFERENCE UNDER 37 C.F.R. §1.78 TO RELATED APPLICATIONS**

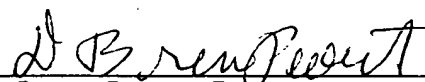
Pursuant to 37 C.F.R. § 1.78, Applicant notes that the above-identified patent application may be related to the following U.S. Patent Applications:

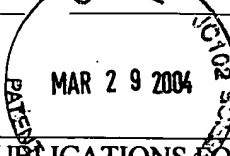
(1) U.S. Patent Application Serial no. 09/142,626, entitled OPTICAL RESONATORS WITH SPIRAL OPTICAL ELEMENTS, filed December 23, 1998;

(2) U.S. Patent Application Serial no. \_\_\_\_\_, entitled \_\_\_\_\_, filed \_\_\_\_\_;

Respectfully submitted,

CHRISTIE, PARKER & HALE

By   
D. Bruce Prout, Esq.  
Reg. No.: 20,958  
Tel: 626/795-9900

FORM PTO-1449 (Colb)		ATTY DOCKET NO. C608:36256	SERIAL NUMBER 09/403,472
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANTS' INFORMATION DISCLOSURE STATEMENT	APPLICANT Asher Friesem et al.		
	FILING DATE October 22, 1999	GROUP ART UNIT N/A	

## U.S. PATENT DOCUMENTS

Examiner's Initials		DOCUMENT NO.	DATE	NAME	CLASS	SUB	FILING DATE
	AA						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB	TRANSLATION
✓	AB	WO 97/34344	Sept. 1997	WIPO			

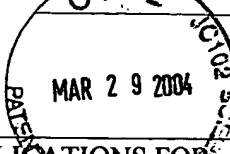
## OTHER ART (Including Author, Bills, Pertinent Pages, Etc.)

	AC	Kol'chenko, A.P. et al., "Control of the Structure of Transverse Laser Modes by Phase-Shifting Masks", <i>Soviet Journal of Quantum Electronics</i> (US), vol. 10, no. 8, August 1980, pp. 1013-1016, XP002074489.
	AD	Casperson, L.W., "Phase Compensation of Laser Beam Modes", <i>Optical and Quantum Electronics</i> (UK), vol. 8, no. 6, November 1976, pp. 537-544, XP000560565.
	AE	Rioux, M. et al, "High-Order Circular-Mode Selection in a Conical Resonator", <i>Applied Optics</i> , vol. 16, no. 7, July 1977, pp. 1791-1792.
	AF	Belanger, P.A. et al, "Super-Gaussian Output from a CO <sub>2</sub> Laser by Using a Graded-Phase Mirror Resonator", <i>Optics Letters</i> , vol. 17, no. 10, May 1992, pp. 739-741.
	AG	Green, R.P.M., "Holographic Laser Resonators in Nd:YAG", <i>Optics Letters</i> , vol. 19, no. 6, March 1994, USA.
	AH	Magni, V., "Resonators for Solid-State Lasers with Large-Volume Fundamental Mode and High Alignment Stability", <i>Applied Optics</i> , vol. 25, no. 1, January 1986, pp. 107-117.
	AI	Abramski, K.M. et al., "Single-Mode Selection Using Coherent Imaging Within a Slab Waveguide CO <sub>2</sub> Laser", <i>Applied Phys. Letters</i> vol. 60, no. 20, May 1992, pp. 2469-2471.

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 (Colb)		ATTY DOCKET NO. C608:36256	SERIAL NUMBER 09/403,472
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANTS' INFORMATION DISCLOSURE STATEMENT	APPLICANT Asher Friesem et al.		
	FILING DATE October 22, 1999	GROUP ART UNIT N/A	

## U.S. PATENT DOCUMENTS

Examiner's Initials		DOCUMENT NO.	DATE	NAME	CLASS	SUB	FILING DATE
	AA						
	AB						
	AC						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB	TRANSLATION
	AD						
	AE						

## OTHER ART (Including Author, Bills, Pertinent Pages, Etc.)

	AF	Casperson, L.W., "How Phase Plates Transform and Control Laser Beams", <i>Laser Focus World</i> (US), May 1994, pp. 223-228, XP002074332.
	AG	
	AH	
	AI	
EXAMINER:		DATE CONSIDERED:
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.		